

Office of Legacy Management Significant Environmental Aspects

The mission of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) is to safely manage DOE's postclosure responsibilities and ensure the future protection of human health and the environment. We have evaluated all of our activities for their potential impact on the environment, and we have identified those aspects that could have a significant impact if they were not controlled. This information is used to develop programs to prevent or mitigate potential impacts and to establish prioritized goals, objectives, and targets for continually improving performance.

Our significant environmental aspects fall into four categories:

- Waste generation and minimization
- Resource consumption, use, and storage
- Releases to the environment
- Land use (including cell construction and maintenance and structure erection or alteration)

Waste Generation and Minimization

We generate waste as a byproduct of our operations. These wastes include materials common to many industries. Solid, universal, hazardous, and radioactive waste streams are managed in compliance with applicable regulatory requirements.

We handle our waste in various ways, including recycling hazardous and nonhazardous waste, treating waste onsite to reduce its volume or the hazards associated with it, accumulating waste for offsite disposal, and operating onsite disposal facilities.

We seek to minimize our generation of waste, especially hazardous and radioactive waste. We conduct pollution prevention opportunity assessments to identify and implement activities that reduce waste, and we have a comprehensive recycling program. We aim to eliminate hazardous materials spills. Our Radioactive Waste Management Program ensures that we limit, control, minimize, and measure the production of radioactive materials in solid waste, gaseous emissions, and liquid discharges.

Resource Consumption, Use, and Storage

We purchase a variety of petroleum, chemical, and radioactive materials that we store and use at LM sites. These materials include diesel fuel and gasoline, acids and other chemicals, herbicides and pesticides, and radioactive sources. In addition, we purchase utilities such as potable water, electricity, natural gas, steam, and propane.

We seek to minimize our storage and use of materials that may pose a risk to the environment, including petroleum, chemicals, and radioactive materials. Our Chemical Control Program was initiated as a best management practice for controlling chemicals harmful to plant systems, structures, components, and personnel. The program mandates that the Environmental Compliance department screen and approve chemicals for specific uses ahead of time. The program also minimizes fire hazards, the use of hazardous substances, chemical exposures to personnel, and the generation of hazardous and mixed waste.

Our Pollution Prevention Program seeks to replace hazardous materials with nonhazardous substitutes, such as using latex paint instead of solvent-based paint. A nationwide survey was conducted to identify equipment containing ozone-depleting substances, and a plan to replace either the equipment or the cooling fluid is being composed. Removing ozone-depleting substances greatly reduces our impact on the atmosphere.

We seek to reduce the purchase of potable water and energy sources by obtaining the goals outlined in DOE Order 436.1 “Departmental Sustainability.”

Releases to the Environment

In accordance with federal and state regulations, operations at several sites are permitted to release wastewater and storm water into receiving streams or groundwater. The National Pollutant Discharge Elimination System regulates discharges to streams. We treat wastewater, routinely test it for metals, chemicals, and radionuclides, and then discharge it to streams. Discharges to groundwater are, in addition, subject to site-specific agreements made between LM and site-specific regulatory agencies.

Radioactive materials, including uranium mill tailings stored in onsite disposal cells, are carefully monitored and maintained to prevent releases to the environment.

Land Use

We seek to reduce our “footprint” on the natural landscape whenever possible. Various maintenance or other monitoring projects, such as road repairs and well installations, may harm the environment. Erosion may be increased, noxious weeds may be introduced, or cultural resources may be disturbed. To prevent such consequences, potential environmental impacts are identified during the planning process, and best management practices or other mitigations are incorporated into the plan before surface-disturbing work begins. We seek to beneficially reuse portions of sites to support renewable energy initiatives and projects.

We would like to hear your comments on our environmental policy and programs. If you have comments or questions, call EMS Coordinator Tracy Ribeiro at (304) 410-4817 or e-mail her at tracy.ribeiro@lm.doe.gov.